UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,671	12/24/2003	Kia Silverbrook	NPB008US	7891

24011	7590	08/11/2006

SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN,   NSW 2041
AUSTRALIA

EXAMINER
LE, KHANH H

ART UNIT	PAPER NUMBER
3622	

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	10/743,671	SILVERBROOK ET AL.
Office Action Summary	Examiner	Art Unit	
	Khanh H. Le	3622	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 March 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-14</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-14</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>7/21/2006</u>

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on March 20, 2006 has been entered. Claims 1-14

are now pending.   Claims 1 and 8 are independent.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and
distinctly claiming the subject matter which the applicant regards as his invention.

3.   **Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being
indefinite for failing to particularly point out and distinctly claim the subject matter which
applicant regards as the invention.**

A single claim covering both an apparatus and a method of use of that apparatus is

invalid because such a claim "is not sufficiently precise to provide competitors with an accurate

determination of the 'metes and bounds' of protection involved" and is "ambiguous and properly

rejected" under section 112, paragraph 2. See IPXL Holdings, L.L.C. v Amazon.Com, Inc.

(CAFC, 05-1009, -1487, 11/21/2005) citing Ex parte Lyell, 17 USPQ2d 1548 (BPAI 1990);.

Because claim 1 recites both a device (sensing device) composed of several components and the method for using that device, it does not apprise a person of ordinary skill in the art of its scope, and it is invalid under section 112, paragraph 2. It is unclear whether infringement of claim 1 occurs when one creates the sensing device that allows the user to receive indicating data therewith, and perform the other claimed steps or whether infringement occurs when the user actually uses the sensing device to perform all the claimed steps. Thus, *"such a claim "is not sufficiently precise to provide competitors with an accurate determination of the 'metes and bounds' of protection involved" and is "ambiguous and properly rejected" under section 112, paragraph 2. Id. at 1550-51. This rule is well recognized and has been incorporated into the PTO's Manual of Patent Examination Procedure. § 2173.05(p)(II) (1999) ("A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph."); see also Robert C. Faber, Landis on Mechanics of Patent Claim Drafting § 60A (2001) ("Never mix claim types to different classes of invention in a single claim.").* IPXL Holdings, supra.

Dependent claims 2-6 are rejected based on their dependency.

Response to Arguments

4.   Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Note as to Official Notice: All facts Officially Noticed in the previous Office Actions and not properly challenged are taken as admitted. MPEP 2144.03.

Claim Rejections - 35 USC § 103

5.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6.   **Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Intelligent Paper" by M. Dymetman, and Max Copperman, in Electronic Publishing, Artistic Imaging and Digital Typography, Proceedings of EP '98, March/April 1998, Springer Verlag LNCS 1375, pp 392-406 in view of Soscia, US 5996893 and further in view of Sekendur, U.S. 5,852,434.**

As to claims 1 and 8, "Intelligent Paper" discloses Interactive paper, a method and system for providing content in a printed document or publication, including:

the document or publication having:

thereon human-readable information (e.g. books)

machine-readable coded data ("Intelligent Paper", page 393,last paragraph: the coded data being invisible; page 392-393, last paragraph, and Fig. 2, p. 396: coded data on surface of paper ; page 2, 2nd full paragraph, the intelligent paper is equivalent of touch sensitive screen...)

the human-readable information including at least one user input (interactive) element (hyperlink) which enables the user to indicate a request for further information relating to the content by interacting with the element using a sensing device which is adapted to transmit data indicating the request to a computer system. (see at least pages 392-393),

portions of the machine-readable coded data being indicative of their own position relative to the printed publication ("INTELLIGENT PAPER" page 392, pair: code page-id, pointer-loc).

the computer system storing an e-description of the printed publication and an association between the input element and an associated entity (implied in "Intelligent Paper" so to respond to the request for information)

and wherein the method and system include

retaining a retrievable record of the printed document, the document being retrievable using the identity data as contained in the coded data ("page-id") .

receiving, in the computer system, indicating data from the sensing device, generated from the machine-readable coded data, such indicating data being indicative of a position and a movement of the sensing device relative to the printed publication ("INTELLIGENT PAPER" page 392, pair: code page-id, pointer-loc);

identifying from the indicating data (pointer-loc ; "INTELLIGENT PAPER" discloses the sensing device sensing its movement relative to the document using at least some of the coded data, and identifying the request in the computer system from the movement being at least partially within a zone associated with the interactive element :see e.g., "INTELLIGENT PAPER" page 393, 1st full paragraph: "position over the Louvre") and the e-description of the document whether the user has selected the input element using the sensing device ("INTELLIGENT PAPER" page 392, pair: code page-id, pointer-loc).

monitoring use of the sensing device in the computer system ("Intelligent Paper", page 401, product catalogues).

and if notifying the associated entity of the selection (Intelligent Paper" discloses sending information after request from a user over a computing system (see at least p.1-2): notification is thereby at least implied before the sending step).

Further, INTELLIGENT PAPER implicitly suggests the publisher can print both the visible and invisible codes with the invisible code as invisible ink both under or over the visible ink. INTELLIGENT PAPER clearly shows that distributing precoded blank sheets to publishers is not the only solution as argued (see p. 399 1st full paragraph.) Visible and invisible codes can be printed.

(As earlier noted, Intelligent Paper" discloses an intelligent paper made of data printed both in visible ink and invisible ink. Page 399 1st paragraph refers to printing invisible ink on top of the visible ink. When referring to the converse option of printing visible ink on top of

invisible ink, it is said " Printing the invisible ink layer under the visible ink permits to distribute white sheets of Intelligent Paper wich can then be printed (or written above) in visible inks in the traditional manner" . This statement means the Intelligent papers are distributed blank to a third party publisher as earlier argued. However this statement also implies that in the converse case (invisible ink over visible ink) , since the intelligent paper would not then be distributed blank, it means it's already printed with both visible and invisible ink by the party printing the invisible ink, Notwithstanding the explicit statement at p.394 1st full paragraph as argued earlier, Intelligent Paper, considered as a whole, also implies the possibility of printing both visible ink and invisible ink by the same party . That another possibility exists to distribute blank papers with invisible ink thereon does not negate or contradict the other possibility clearly implied in the reference.)

INTELLIGENT PAPER does not specifically disclose printers printing both types of ink as claimed. However, printers printing both types of ink are known.

For example, Soscia, US 5996893, discloses methods and apparatus for generating images and/or photographs from digital data files with data, e.g., audio data, stored on the photograph . Ink which is invisible or almost invisible to the human eye but which can be detected using an optical reader is used for printing the data on the photograph. The audio data in invisible ink, may be represented by a bar code, and may be read and played using a hand held scanner. The printer can print both visible and invisible ink. (see at least abstract, Figs. 1-4 and associated text; col. 3 lines 11-35); col. 5 lines 5 1. 30-60) .

It would have been obvious to one skilled in the art at the time the invention was made to add the Soscia printers with capabilities of printing both inks and both codes to INTELLIGENT PAPER, so to allow publishers to print the invisible codes together with the visible information as suggested by INTELLIGENT PAPER at see p. 399 1st full paragraph.

The above references are silent as to the newly added details of the sensing device, however,

Sekendur discloses a sensing device comprising:

(a) an image sensor (the scanning end, including the lens, lens shade , light filter, "CCD", see

col. 6 lines 1-14 , Fig 6, combination of items 12, 17, 13; or (col. 6 lines 21-37; Fig 7

,combination of items 12, 13, 19, 20) adapted to capture images (e.g. bar codes, see Fig. 4a and

4 ; col. lines; or other optical image, col. 7 lines 10-15) of at least some of the coded data (the

coded data represented by the bar codes see Fig. 4a and 4) when the sensing device is placed in

an operative position relative to the printed publication (abstract, col. 2 lines 44-47) ;

and

(b) a processor (Fig 6, item 16 or Fig 7 item 21 and associated text; abstract,: " computer for

analysis", (col. 6 lines 13-20 ; col.6 lines 37-46) adapted to:

(i) identify at least some of the coded data (coordinate data, see col. 5 lines 47-62)   from one or

more of the captured images (e.g. bar code images , see Figs 4, 4a, 5, 5a; or other image, see

col. 6 lines 60-62: even hand-drawn image)

(ii) determine an orientation within the captured images of at least some of the coded data

(interpreted as to determine a position or location relative to the data medium(paper) using the

coded data (coordinate data e.g. x,y) from the captured image (e.g. the bar code image)) : see

col. lines 5 lines 40-46: any image such as bar code, grit, or other written or printed image shown

in Figs, 1-3, is scanned , analyzed to determine the location and path of the stylus by e.g.

interpolation, extrapolation, triangulation methods)

(iii) decode at least some of the coded data using the determined

orientation (in knowing the location (i.e. the orientation) of the captured image , some of the

coded data, such as x,y coordinates are thereby decoded as well)

(iv) generate the indicating data being indicative of at least one of a

position and a movement of the sensing device relative to the

publication (col. 2 lines 44-47; col. lines 5 lines 40-46:   using at least some of the decoded

coded data x,y coordinates)

As to step iv) Sekendur discloses detection of position and movement of the stylus

relative to a data medium such as a paper coded with x,y coordinates codes, which may be

written upon and where such writing can also be scanned to determine its location and the

movement of the stylus in relation thereto as well as in relation to the paper (see col. 6 lines 60-

62; Fig. 3 and associated text)

. As discussed above, INTELLIGENT PAPER discloses determining pointer location on

a printed medium as a part of determining if a user selected an input element (see pages 4-5

above) but did not disclose details about the sensing device.

It would have been obvious to one skilled in the art at the time the invention was made to

use the sensing device of SEKENDUR to scan printed data on the printed publication of

INTELLIGENT PAPER as one particular means for determining pointer location. Using

Sekendur with *INTELLIGENT PAPER* would not be incompatible since SEKENDUR teaches

scanning written data (see Fig. 3 and associated text) and since printed data is analogous to

written data as far as scanners are concerned.

As to claims 2 and 9, the associated entity is a publisher.

As to claims 3 and 10,the input element is a hyperlink.

As to claims 4 and 11, the associated entity is a publisher computer system.

As to claims 5 and 12,"INTELLIGENT PAPER" discloses a catalog (printed publication

with a plurality of pages) and wherein the machine-readable coded data on or in the page is

indicative of an identity of the page ("INTELLIGENT PAPER" page 392, code page-id) and of the at least one interactive element ("INTELLIGENT PAPER" page 392, pointer-loc).

As to Claims 6-7 and 13-14,

Intelligent Paper discloses wherein the at least one interactive element is provided in association with the advertising material (Intelligent Paper as printed product catalog with catalog items being interactive; also see p. 401, 1st full paragraph": targeted catalogs with user's addresses). No payment was disclosed in INTELLIGENT PAPER.

However, Official Notice was taken that charging a vendor/advertiser for referral of a potential customer is old and well-known to compensate the referring party. Further charging for clicks of an on-line potential customer is also well-known. Since Intelligent Paper operates as a computer and a source for referrals via user clicks ('selection of an input element"), it would have been obvious to one skilled in the art at the time of the invention to incorporate charging the beneficiaries of the referrals into the teachings of "Intelligent Paper for the above-discussed advantages. Calculating and notifying a party associated with such charge when a user clicks on an Intelligent Paper would further be obvious to effect eventual completion of such charges.

Conclusion

7.   Prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamada, US 5,927,872, discloses handy printer system.

Kagayama et al, US 5,861,877, discloses electric pen that functions as hand-held printer

Wolff et al., US 6,081,261, discloses manual entry interactive paper and electronic document handling and processing system.

Wolff et al., US 6,201,903 B1, discloses method and apparatus for pen-based faxing.

Kamimoto, US 5870207, discloses fax systems

Kaneko et al., US 5,636,296, discloses image analysis system

Echigo et al, US 5,748,868 discloses 2-dimensional management pattern, information display tag, and image processing method and device.
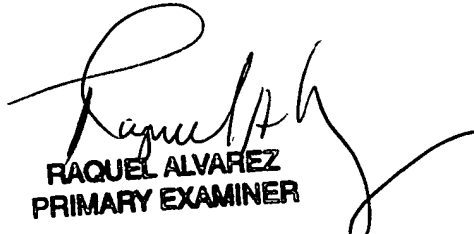
Venable et al., US 6,326,983 disclose structured image (SI) format for describing complex color raster images.

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh H. Le whose telephone number is 571-272-6721. The Examiner works a part-time schedule and can normally be reached on Tuesday-Wednesday 9:00-6:00.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Eric Stamber can be reached on 571-272-6724. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-3600.

August 1, 2006

KHL

RAQUEL ALVAREZ
PRIMARY EXAMINER